

EPA Region 8's National Pollutant Discharge Elimination System (NPDES) Permitting Program

Section 402 of the Clean Water Act prohibits the discharge of pollutants to Waters of the U.S. except in compliance with a NPDES permit. The implementing regulations include requirements for permitting direct discharges including concentrated animal feeding operations and industrial and municipal stormwater. The NPDES program also includes regulations to control the discharge of pollutants from industrial sources to publicly-owned treatment works (POTWs) via the pretreatment program, and the use and disposal of treated sewage sludge via the biosolids program.

Direct Implementation

- The Wastewater Unit directly implements the NPDES program in Indian country in Region 8 and for Colorado federal facilities. Permitted facilities are primarily lagoon systems which treat domestic wastewater, but also include mechanical wastewater treatment plants, CAFOs, oil and gas production facilities, municipal separate storm sewer systems (MS4s), and a sulfuric acid plant. Region 8 issues 6 general permits (one per state) for the lagoon systems in Indian country as a matter of administrative efficiency for EPA and the facilities.

	Under General Permits	Under Individual Permits
Number of Permitted NPDES facilities	151	91

- Currently, 85% of regulated facilities in Indian country are covered by a current permit. Historically, Regional backlog has been less than 10%. The increased backlog is attributed to a significant staff turnover due to retirements and an overall reduction in staffing levels.
- The time to issue individual permits varies considerably based on the quality of the initial permit applications received, and the technical and legal complexity of the permit. The range is anywhere from 180 days to 5 years.
- The Wastewater Unit implements the pretreatment program in Colorado, Montana, and Wyoming, working with 37 EPA-approved municipal pretreatment programs to protect 41 POTWs. (Four of these municipalities have two POTWs.)
 - The Wastewater Unit also works with the other non-approved municipalities in Colorado, Montana, and Wyoming to ensure significant loadings of pollutants from non-domestic or industrial users do not impact the POTW.
- The biosolids program is not delegated in Colorado, Montana, North Dakota, and Wyoming. This program can be implemented by permit or by rule. In 2015, Region 8 terminated its biosolids general permit and opted to implement the program by rule.

State Oversight

- Region 8 conducts oversight of state NPDES programs as follows:

- Permit quality reviews (PQRs) of each state are conducted every five years to identify regulatory deficiencies and possible program improvements.
- Real-time review of less than 10% of state-issued permits, comparable to Region 5. Most other Regions review 20-80% of state-issued permits.
- Technical assistance and training to states and the regulated community on an as-needed basis. A recent example is a stormwater workshop held for federal facilities in Colorado.

Streamlining:

- The Wastewater Unit recently conducted a LEAN evaluation of the permit issuance process and identified some efficiencies. The evaluation revealed that significantly reducing the time to issue permits will require additional resources to create technological efficiencies, increased staffing, or both.
- The recommendation for NPDES permitting in a recent Department of Commerce report on permit streamlining for manufacturing was focused partly on improving permit applications: “Provide permit applicants with clear descriptions of required steps and additional tools to assist them in completing the permitting process.” The Water Permits Division in OW is the lead on implementing specific actions to address the recommendation.
- A national LEAN assessment of state oversight is underway.

EPA Region 8's Underground Injection Control (UIC) Permitting Program

Under Safe Drinking Water Act (SDWA) authority, the mission of the UIC program is to protect underground sources of drinking water (USDW) from contamination (note: USDWs are primarily defined as aquifers that contain less than 10,000 mg/l of total dissolved solids). We do this by regulating the construction and operation of six classes of injection wells:

- Class I, hazardous and non-hazardous waste disposal below all USDWs
- Class II, injection of fluids associated with oil and gas production
- Class III, solution mining of underground minerals (e.g., uranium)
- Class IV, injection of hazardous waste into or above USDWs (banned)
- Class V, experimental or "other"
- Class VI, injection for the purpose of geologic sequestration of carbon dioxide.

Injection into USDWs is prohibited except for certain injections into Class V wells. However, injection can still be approved if a USDW is exempted from being a USDW through the aquifer exemption process, if specific criteria are met. States and tribes with primacy can request aquifer exemptions, but under the UIC regulations it is EPA's role to review and approve those requests.

Direct Implementation

- We implement UIC programs in Region 8 Indian country for all well classes, with the exception the Fort Peck reservation where the Assiniboine and Sioux Tribes have obtained authority to implement the Class II program, and for non-Class II wells in Colorado, Montana, and South Dakota primarily through energy-related permitting.
- We have 322 UIC permits in effect regulating approximately 1,400 (Class I through V) injection wells. The vast majority are approximately 1,200 Class II wells regulated under 262 permits for the enhanced recovery of oil (EOR) and gas or disposal of oil and gas-produced fluids.
- We have averaged approximately 175 permit actions per year over the last three years which includes issuing new permits, adding wells to existing area permits, modifying existing permits, and authorizing injection after permits are issued. A primary factor influencing permitting activity is the market price of oil/gas and other energy resources.
- Final UIC Class II permits can typically be issued within six months if the prospective operator has included all the standard and appropriate information when submitting an initial application and we receive no substantive public comments. This includes the time needed to draft the permit, secure financial assurance from the applicant, take public comment for 30 days, and comply with other applicable laws including the Endangered Species Act and National Historic Preservation Act.
- Two current permitting issues:
 - We have seven Class II permit applications that we expect to take action on once we conclude tribal consultation with the MHA's tribal leadership on the Fort Berthold Indian Reservation.
 - In March 2017, we issued draft Class III and V area permits for a proposed uranium in-situ recovery (i.e., Dewey Burdock) project in the southern Black Hills. After conducting 7 tribal consultations and holding five public hearings during a 105-day public comment period, we received over 8,000 public comments and are now preparing responses to those comments and following up on additional requests for tribal consultation.

State/Tribal Oversight

- We conduct oversight of ten state and tribal UIC primacy programs. With the exception of South Dakota, the state Class II programs are implemented by the state or tribal oil and gas agencies; the other well class programs in North Dakota, Utah and Wyoming are implemented by the state environmental departments.
 - Annual oversight typically includes conducting brief midyear reviews of state/tribal UIC program performance, and reviewing end of year accomplishments to inform whether EPA's level of oversight should change.
 - Formal reviews of state UIC programs have been infrequent; however, we are currently working with OGWDW to determine what criteria should be used to determine the frequency and scope of such reviews in the future.
 - We do not review or comment on state-issued UIC permits.
- State and tribal program oversight also includes review and approval of aquifer exemptions requested by states/tribes that can enable injection into aquifers that would otherwise be considered USDWs. These exemption requests must show that the aquifer is not a current source of drinking water and will not serve as a future source of drinking water.
- We conducted an in-depth review of North Dakota's Class II well program in 2015 and expect to issue a final report of findings later this year. We have shared a draft of our report with the State and are working with them on improving some aspects of implementation to ensure continued protection of USDWs.
- EPA also reviews and approves state or tribal requests for primacy for the UIC program. Region 8 conducts the technical and legal review, and primacy approvals are done as a rule-making out of EPA HQ and approved by the Administrator.
 - We recently proposed approval of North Dakota's UIC Class VI program application, and are currently working on responses to public comments received on that action. If finalized, ND will be the first state in the nation to have primacy for UIC Class VI.
 - Wyoming has also expressed interest in obtaining Class VI primacy and expects to submit an application to EPA as early as the end of December.
 - Mandan, Hidatsa, and Arikara (MHA) Nation on the Fort Berthold Indian Reservation have also expressed interest in pursuing primacy for the UIC Class II program.

Streamlining:

- The UIC program realized significant efficiencies beginning in 2013 when it consolidated dozens of existing Class II permits into the Region's largest Class II area permit for EOR issued to Newfield Production Company. This new permit covers 95 square miles in the Monument Butte Field within the Uintah and Ouray Indian Reservation in Utah and regulates over 600 wells.
- In collaboration with our UIC enforcement team, we are implementing a new LEAN-based process to streamline financial assurance procedures to help ensure timely UIC permitting.